

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A method for applying a hot melt adhesive in a melted state to a surface of a substrate, the method comprising the steps of:

preparing a hot melt adhesive, which is a urethane reactive hot melt adhesive and melts in a temperature range of 100 to 130°C, and a coating equipment including plural applicator roller stages which form an adhesive layer by laminating plural coatings of a hot melt adhesive;

conveying the substrate which is a wood board at a predetermined speed;

rotating applicator rollers of the applicator roller stages in the direction, to which the substrate is moved on a conveyer, to cover the substrate with the hot melt adhesive in a melted state, wherein

at least one applicator roller has a surface made of a material which reduces slipping and the hot melt adhesive is supplied from a pool of the hot melt adhesive existing in a valley formed by the applicator roller and a metering roller via an interface of the rollers, and the applicator roller is rotated at a circumferential speed at least 20% slower or at least 20% faster than the predetermined speed of the substrate to cause the roller to slip; and

contacting the upper surface of the substrate from above with the applicator rollers to form the adhesive layer on substantially the entire of the upper surface of the substrate with the hot melt adhesive.

Claim 2 (Original): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the adhesive layer is formed by applying a plurality of coatings of the hot melt adhesive.

Claim 3 (Original): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the circumferential speed of the applicator roller is set to be less than the predetermined speed at which the substrate is conveyed, with a speed reduction ratio ranging from 20% to 80% and equal to (conveying speed of substrate- circumferential speed of applicator roller) x 100 / conveying speed of substrate.

Claims 4-9 (Canceled).

Claim 10 (Previously Presented) A method for producing a laminated object, the method comprising the steps of:

conveying a substrate which is a wood board at a predetermined speed;

contacting the upper surface of the substrate from above with plural applicator rollers of plural applicator roller stages which form an adhesive layer by laminating plural coatings of a hot melt adhesive;

rotating the applicator rollers covered with a hot melt adhesive in a melted state which is supplied from a pool of the hot melt adhesive located between the applicator rollers and metering rollers via an interface of the applicator roller and metering rollers, wherein at least one applicator roller has a surface made of a material which reduces slipping, and is rotated at a circumferential speed at least 20% slower or at least 20% faster than the predetermined speed at which the substrate is conveyed to cause it to slip;

forming an adhesive layer on substantially the entire of the upper surface of the substrate with the hot melt adhesive; and

applying a laminate on the adhesive layer which is formed on the substrate.

Claim 11 (Original): The method of producing a laminated object according to claim 10, wherein the adhesive is applied by a plurality of applicator rollers.

Claim 12 (Original): The method of producing a laminated object according to claim 10, wherein the substrate is a wood board, the adhesive is urethane reactive hot melt adhesive, and the laminate is a film or a decorative paper.

Claim 13-14 (Canceled).

Claim 15 (Previously presented): The method for applying the hot melt adhesive to the surface of the substrate according to claim 1, wherein a clearance between the applicator roller and a backing roller is 99% to 95% of the thickness of the substrate.

Claim 16 (Previously Presented): The method for applying the hot melt adhesive to the surface of the substrate according to claim 1, wherein the urethane reactive hot melt adhesive which melts in a temperature range of 100 to 130°C has a viscosity of 1,000 to 30,000 mPa·s.

Claims 17-18 (Canceled).

Claim 19 (Previously Presented): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the laminated object is an architectural material.

Claim 20 (Previously Presented): The method of producing a laminated object according to claim 10, wherein the substrate on which the laminate is applied via the adhesive layer is an architectural material.

Claims 21 (Previously Presented): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the substrate is substantially conveyed at a predetermined speed horizontally, while the substrate is conveyed and contacted with the applicator roller.

Claims 22 (Previously Presented): The method of producing a laminated object according to claim 10, wherein the substrate is substantially conveyed at a predetermined speed horizontally, while the substrate is conveyed and contacted with the applicator roller.

Claim 23 (Previously Presented): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, further comprising a step of bonding the adhesive layer formed on the substrate with a laminate which is selected from the group consisting of a film, a decorative paper, a laminate material and a metallic paper.

Claim 24 (Previously Presented): The method for producing a laminated object according to claim 10, wherein the laminate is selected from the group consisting of a film, a decorative paper, a laminate material and a metallic paper.

Claim 25 (Previously Presented): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the applicator roller has a surface made of a rubber.

Claim 26 (Previously Presented): The method for producing a laminated object according to claim 10, wherein the applicator roller has a surface made of a rubber.

Claim 27 (Previously Presented): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the thickness of the adhesive layer is in the range from 20 to 80 μm , and the circumferential speed of the applicator roller is slower than the predetermined speed of the substrate such that the speed reduction ratio is in a range of 20 to 80%.

Claim 28 (Previously Presented): The method for producing a laminated object according to claim 10, wherein the thickness of the adhesive layer is in the range from 20 to 80 μm , and the circumferential speed of the applicator roller is slower than the predetermined speed of the substrate such that the speed reduction ratio is in a range of 20 to 80%.

Claim 29 (New): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the hot melt adhesive is a polyester polyol-type urethane reactive hot melt adhesive.

Claim 30 (New): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the applicator rollers comprise a metal applicator roller and a rubber applicator roller.

Claim 31 (New): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the substrate is conveyed with a conveyor belt.

Claim 32 (New): The method for applying a hot melt adhesive to a surface of a substrate according to claim 1, wherein the hot melt adhesive is supplied from the applicator rollers to the surface of the substrate surface at 15 to 60 g/m^2 .

Claim 33 (New): The method for producing a laminated object according to claim 10, wherein the hot melt adhesive is a polyester polyol-type urethane reactive hot melt adhesive.

Claim 34 (New): The method for producing a laminated object according to claim 10, wherein the applicator rollers comprise a metal applicator roller and a rubber applicator roller.

Claim 35 (New): The method for producing a laminated object according to claim 10, wherein the substrate is conveyed with a conveyor belt.

Claim 36. The method for producing a laminated object according to claim 10, wherein the hot melt adhesive is supplied from the applicator rollers to the surface of the substrate surface at 15 to 60 g/m².